

Memorandum

To : Jim Ryan

Region 2

Department of Fish and Game 1701 Nimbus Road, Suite A Rancho Cordova, CA 95670 Date: January 7, 1981

File No.:

Subject: Antelope Lake

Creel Census, 1980

From: Department of Water Resources

Anglers at Antelope Lake were censused on 50 days, between April 26 and November 2, 1980, by Department of Water Resources Student Assistants and Department of Fish and Game Seasonal Aids. Anglers were interviewed from shore and boat with survey effort concentrated on the shore near Antelope Dam. Surveyors recorded the number of anglers in each party, county of residence, hours fished, number and species of fish caught, and the length (to the nearest ½ cm FL) for each fish.

We interviewed 852 anglers of which 780 were shore and 72 were boat anglers. Shore anglers had fished a total of 2,005% hours, catching 641 rainbow trout (0.32 trout per hour) and 313 brown bullhead (0.16 BB per hour) (Table 1). One golden shiner and three Lahontan redside were also caught by shore anglers. Boat anglers censused had fished 277 hours, catching 169 rainbow trout (0.62 trout per hour) and two brown bullhead (Table 2). The rainbow trout ranged in length from 14 to 41 cm (5.5 to 16 in) with an average length of 23 cm (9 in) (Figure 1 and Appendix I). The brown bullhead ranged from 12.5 to 32 cm (5 to 12.5 in) with an average length of 19.5 cm (7.8 in).

We interviewed 30 shore anglers who had finished fishing. They fished an average of 3.2 hours and caught 0.30 trout per hour (0.96 trout per angler day). Nineteen boat anglers who had finished fishing were also censused. They fished an average of 4.0 hours and caught 0.80 trout per hour (3.20 trout per angler day).

Most of the trout caught were apparently planted in 1979, but the 13,440 catchable-sized trout planted in early June 1980 also may have contributed significantly to the catch (Table 3).

Anglers from 34 counties were censused (Appendix II). The majority of anglers came from local counties (37%), the Sacramento Valley (31%), and the San Francisco Bay area (16%). The North Coast, mountain, and Southern California counties provided 12% of the anglers and the remaining 4% had out-of-State origin (Figure 2).

During the three years we have censused Antelope Lake, catch per hour for shore anglers has steadily increased from 0.18 in 1978 to 0.32 in 1980 (Table 4). During the same period, the average length of rainbow trout has decreased from 29 to 23 cm (11.5 to 9 in) (Table 5). The catch per hour for brown bullheads has increased from 0.01 in 1978 to 0.15 in 1980 for shore anglers and remained negligible for boat anglers. The average length on censused bullhead has increased from 16.5 to 19.5 cm (6.5 to 7.8 in).

Ralph N. Hinton, Chief Recreation Section Northern District

8-446-2283

Attachments

TABLE 1 ANTELOPE LAKE, 1980 SUMMARY OF CATCH PER HOUR, SHORE ANGLERS

<u>Date</u>	Anglers	Angler Hours	Rainbow Trout Caught	Catch/ Hour	Other Fish Caught	Catch/ Hour
April 26 April 27 April Total	63 49 112	233.25 122.75 356	53 55 108	0.303	33 BB ¹ / 11 BB 44 BB	0.124
May 9 May 10 May 11 May 13 May 14 May 19 May 20 May 24 May 25 May 31 May Total	2 6 11 5 19 14 17 7 25 17	.50 16 13 15.75 52.50 64 86 10 81 38.50 377.25	0 16 0 3 18 28 30 4 24 23	0.387	O 5 BB 1 BB 1 BB 4 BB 1 BB 0 6 BB O 22 BB	0.058
June 6 June 17 June 18 June 21 June 22 June 24 June 25 June 27 June 28 June Total	4 47 32 10 12 26 17 22 35 205	5.50 122 63 25 30.25 51 37 84 78.25	5 73 36 9 17 11 10 24 55 240	0.484	3 BB 2/ 1 GSH2/ 0 7 BB 0 3/ 3 LRS- 2 BB 0 2 BB 14 BB 1 GSH 3 LRS	0.023 0.002 0.006
July 1 July 2 July 4 July 5 July 12 July 13 July 14 July 15 July 22 July Total	53 42 29 21 20 18 8 10 205	88 3 144.75 99 59 52.50 33 12.50 16 507.75	11 4 35 22 16 22 5 3 1 119	0.234	94 BB 0 0 1 BB 6 BB 14 BB 6 BB 3 BB 5 BB 129 BB	0.254
August 1 August 2 August 10 August 26 August 27 August 30 August 31 August Total	5 9 10 16 7 16 <u>17</u> 80	7 18 15 33.50 7 31 34 145.50	0 3 2 2 0 7 0 14	0.096	0 28 BB 3 BB 14 BB 0 16 BB 0	0.419

^{1/} BB - brown bullhead, 2/ GSH - golden shiner 3/ LRS - Lahontan redside

TABLE 1 (Continued)

<u>Date</u>	Anglers	Angler Hours	Rainbow Trout Caught	Catch/ Hour	Other Fish Caught	Catch/ Hour
September 1 September 20 September 21 September 25 September 29 September 30 September Total	0 9 3 10 2 0 24	0 22 7,50 8,50 2 0 40	0 1 2 1 0 0 4	0.100	0 12 BB 9 BB 1 BB 0 0	0.550
October 10 October 11 October 12 October 22 October 23 October Total	2 7 6 2 <u>7</u> 24	7.25 15 24.50 4 19 69.75	1 0 . 7 1 1 10	0.143	4 BB 4 BB 2 BB 8 BB 1 BB	0.272
November 1 November 2 November Total	6 <u>1</u> 7	12 <u>1</u> 13	0 <u>0</u>	0	2 BB 0 2 BB	0.154
SEASON TOTAL	780	2005.25	641	0.320	313 BB 1 GSH 3 LRS	0.156 0.0005 0.001

TABLE 2

ANTELOPE LAKE, 1980
SUMMARY OF CATCH PER HOUR, BOAT ANGLERS

	<u>Date</u>	Anglers	Angler Hours	Rainbow Trout Caught	Catch/ Hour	Other Fish Caught	Catch/ Hour
,	April 26 April 27 April Total	24 18 42	128 36.50 164.50	72 <u>31</u> 103	0.626	0 <u>0</u> 0	0
	May 11 May 14 May 25 May Total	4 2 <u>3</u> 9	12 3.50 18 33.50	11 0 . <u>6</u> 17	0.507	0 0 0 0	0
	June 6 June 17 June 21 June 27 June Total	4 2 3 <u>3</u> 12	16 7.50 12 <u>7.50</u> 43	22 1 9 <u>1</u> 33	0.767	2 BB- 0 0 0 0 2 BB	0.046
	July 14 July 22 July Total	6 <u>3</u> 9	24 12 36	14 2 16	0.444	0 <u>0</u> 0	0
	SEASON TOTAL	72	277	169	0.610	2	0.007

^{1/} BB - brown bullhead

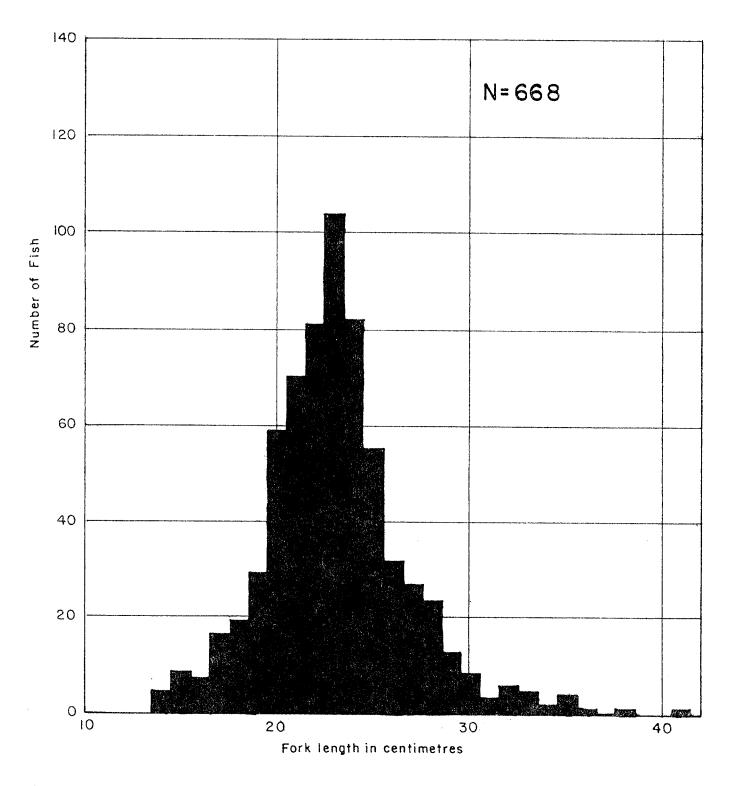


Figure I-Length and Frequency of Censused Rainbow Trout
Antelope Lake, 1980

TABLE 3
TROUT PLANTING SUMMARY
ANTELOPE LAKE, 1980

<u>Date</u>	Species	Number	No. per lb.
June 2	$_{\mathrm{RT}} \frac{1}{}$	13,440	2.8
June 9	RT	150,000	150
September 15	RT	19,920	8.3
December 1	cc <u>2</u> /	6,050	5.5
		189,410	

^{1/} Rainbow Trout

^{2/} Channel Catfish

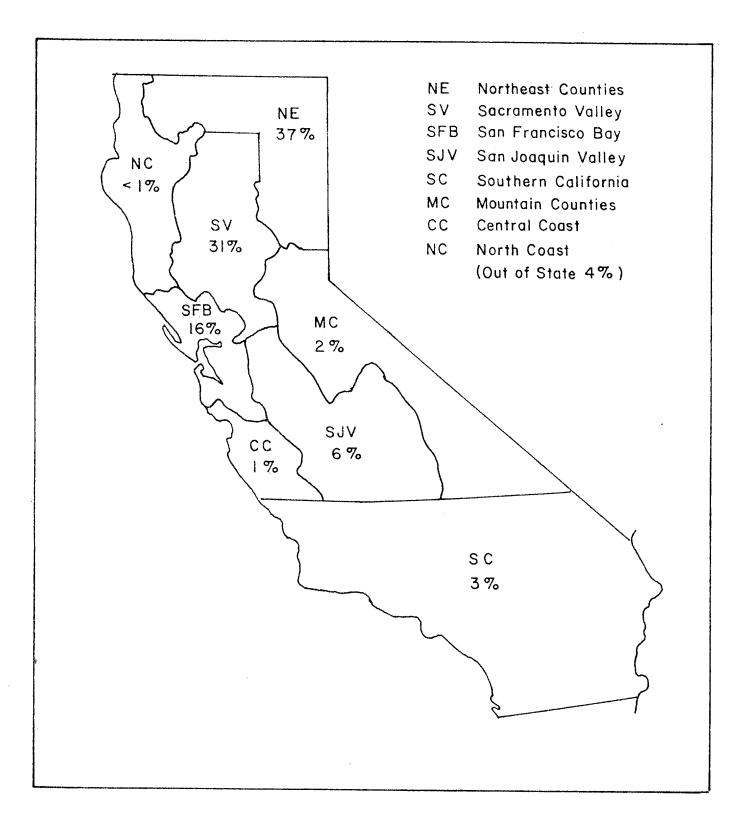


Figure 2-Antelope Lake Angler Origin by County Groups
1980

TABLE 4

CATCH PER HOUR AT ANTELOPE LAKE, 1978-80

	Shore	Anglers	3	Boat	Anglers	S
Year	Hours Censused	RT* C/H	BB**	Hours Censused	RT* C/H	BB** C/H
1978	2,076	0.18	0.01	248	0.33	0.00
1979	5,510	0.28	0.09	321	0.55	0.03
1980	2,005	0.32	0.15	277	0.62	0.01

^{*}RT - rainbow trout

TABLE 5

AVERAGE LENGTH OF FISH CAUGHT
AT ANTELOPE LAKE, 1978-80

	Rainbo	w Trout	Brown Bu	ıllhead
Year	cm	<u>in</u>	cm	<u>in</u>
1978	29	11.5	16.5	6.5
1979	26	10.2	18.5	7.4
1980	23	9.0	19.5	7.8

^{**}BB - brown bullhead

APPENDIX I

ANTELOPE LAKE CREEL CENSUS, 1980

Rainbow Trout (in centimetres)

Date	No.	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	NM*
Apr 26 27	125 86	1 -		1 -	_ 4	3	1 12	_ 12	6 13	16 10	9 6	7 9	3 5	5 2	3 1	3	2 2	3 1	1 1	1 2	- 3	1	-	-	- -	_	-	-	- -	59
May 9 10 11	0 16 11	- - -	- -	- 	- - -	- - -	-	- - 1	- - 2	- - 5	-	<u>-</u>	- - 2	-	- -	- - 1	-	- - -	- - -	- - -	- - -	 	-	- - -	- -	-	- - -	- - -	-	16
13 14 19 20	3 18 28 30	- 1 -	- - -	- - -	- - 1	1 -	- 3 2	- 6 3	- 1 4 4	2 1 - 2	5 10 13	1 6 - 1	1 1 1	- - 2	1 -	- 1 -	1 1 1	- 1 -	-	- - -	-	-	- - -	-	-	-	- - -	-	1 -	
24 25 31	4 30 23	-	<u>-</u> -	2 1 -	- 2 -	1 - -		1 5 1	- 6 2	- 4 3	- 6 4	1 1	- 2 2	- 1 1	- - 1	- - 1		 	- - -	- - -	- - -	- - 1	- 2 -	-	- -	-	-	-	-	6
Jun 6 17 18 21	27 74 36 18	- - -	 	- - -	- - 3	- 2 2 1	- 3 - -	3 7 2 2	6 8 8 2	3 15 7 1	3 8 6 1	5 7 6 1	4 4 3 2	1 - 4	1 1 -	3 2 1 -	1 - 1	2 -	-	- - -	-	- - -	- - -	 	- - -	- - -	- - -		- - -	13
22 24 25 27 28	17 11 10 25 55	- 1 1		- - - -	3 2	- - -	1 - 1	1 - - 3 1	3 - 1 3	1 1 5 5	2 - 6 6	4 1 - 7	2 - 1	1 1 4 - 1	6 2 - 3	- 1 1 1 3	- - - 1		- - - -	1		-	-	 			-		- - -	1 20
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5 6 12 13 14 15 22	0 16 22 19 3		3 -	-		3 1 1	2 2	5 2 - 1	-	1	2 1 - 1	- 2 -	2 1 2 1	1	-	- - 1		-	-	- - 1 -	- - - -	-	-	-	-		-	-		12 8

^{*}NM - not measured

APPENDIX I (Continued)

Date	No.	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	NM
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Total	810	14	8	7	16	19	29	59	70	91	104	82	55	31	26	23	13	8	3	6	5	2	4	1	0	1	0	0	1	142

APPENDIX II

ANGLER RESIDENCE SUMMARY ANTELOPE LAKE, 1980

County of Residence	Number	Percent
Alameda	22	2.6
Butte	136	16.0
Colusa	4	0.5
Contra Costa	56	6.6
El Dorado	10	1.2
Fresno	7	0.8
Glenn	9	1.1
Humboldt	2	0.2
Lake	6	0.7
Lassen	182	21.3
Los Angeles	12	1.4
Madera	3	0.4
Marin	$\bar{\iota}_{4}$	0.5
Mendocino	1	0.1
Merced	3	0.4
Monterey	7	0.8
Napa	11	1.3
Nevada	7	0.8
Placer	2	0.2
Plumas	129	15.0
Riverside	6	0.7
Sacramento	14 14	5.2
San Diego	6	0.7
San Francisco	4	0.5
San Joaquin	38	4.5
Santa Clara	20	2.3
Shasta	5	0.6
Solano	6	0.7
Sonoma	. 6	0.7
Sutter	29	3.4
Tehama	9	1.1
Ventura	1	0.1
Yolo	8	0.9
Yuba	9	1.1
Out-of-State	31	3.6
Non-record	17	2.0
Total	852	100.0